

Notice of Allowability

Application No.

10/023,995

Examiner

Matthew O Savage

Applicant(s)

BRETTSCHEIDER ET AL.

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11-17-04.
2. ☒ The allowed claim(s) is/are 1-3, 5-10, 13, 14, 16, 18-23, 25-32, 35, 36, 38, and 40-46 renumbered 1-36, respectively.
3. ☒ The drawings filed on 21 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Matthew O Savage
Primary Examiner
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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Mueller on 2-4-05.

1. (Currently amended) A process for manufacturing screens suitable for use in wet screening fibrous paper suspensions, in which the screens include at least one screen plate having a number of sorting apertures, the process comprising:

providing a number of fastening openings in the at least one screen plate, said fastening openings being circular and having a minimum diameter;

providing profiled pieces each having an insertion portion, each said insertion portion having polygonal cross-sectional shape with a maximum cross-sectional dimension that is greater than the minimum diameter of said fastening openings, and

press inserting said insertion portions of the profiled pieces into the fastening openings, wherein at least a portion of the profiled pieces are arranged to project beyond a screen surface.

Claim 4 has been canceled.

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5. (Currently Amended) The process in accordance with claim ~~[[4]]~~ 1, wherein the ~~[[regular, polygon-shaped profiled piece]]~~ polygonal cross-sectional shape is an octagon.

On line 2 of claim 10, "plate" has been changed to --surface--.

Claims 11 and 12 have been canceled.

13. (Currently Amended) The process in accordance with claim 1, wherein the fastening holes are provided to go through the at least one screen plate and to have a larger ~~[[cross section on a side of the at least one screen plate at which the profiled pieces are inserted than on]]~~ diameter adjacent the screen surface than adjacent an opposite side of the at least one screen plate.

Claims 15 and 17 have been canceled.

19. (Currently Amended) The process in accordance with claim 1, wherein the fastening holes are ~~[[positioned separately on the at least one screen plate and are spaced out at]]~~ spaced apart from one another by a distance of at least about 50 mm.

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21. (Currently Amended) The process in accordance with claim 1, wherein the sorting apertures have [[a circular cross section with]] a diameter between about 1 mm and about 30 mm.

23. (Currently amended) A screen suitable for use in wet screening fibrous paper suspensions, comprising:

at least one screen plate having a plurality of sorting apertures and a plurality of fastening openings, said fastening openings being circular and having a minimum diameter; and

a plurality of profiled pieces each having an insertion portion, each said insertion portions having a polygonal cross-sectional shape with a maximum cross-sectional dimension that is greater than the minimum diameter of said fastening openings,

wherein said insertion portions are [[structured and arranged to be pressably insertable]] pressed into said fastening openings, and [[such that when fully inserted into said fastening openings,]] at least a portion of the profiled pieces [[are arranged to]] project beyond a screen surface.

Claim 24 has been canceled.

On line 1 of claim 25, "24" has been changed to -23--.

Claims 33 and 34 have been canceled.

35. (Currently Amended) The screen in accordance with claim 23, wherein the fastening holes are provided to go through the at least one screen plate and to have a larger [[cross section on a side of the at least one screen plate at which the profiled pieces are inserted than on]] diameter adjacent the screen surface than adjacent an opposite side of the at least one screen plate.

Claim 37 and 39 have been canceled.

41. (Currently Amended) The screen in accordance with claim 23, wherein the fastening holes are [[positioned separately on the at least one screen plate and are spaced out at]] spaced apart from one another by a distance of at least about 50 mm.

45. (Currently Amended) A process for manufacturing screens suitable for use in wet screening fibrous paper suspensions, in which the screens include at least one screen plate having a number of sorting apertures, the process comprising:

providing a number of fastening openings in the at least one screen plate; and

forming a ridge on the at least one screen plate by inserting a plurality of profiled pieces into the fastening openings in such a manner that at least a portion of the profiled pieces project above a screen surface and in such a manner that adjacent ones of said portions touch one another.

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46. (Currently Amended) A process for manufacturing screens suitable for use in wet screening fibrous paper suspensions, in which the screens include at least one screen plate having a number of sorting apertures, the process comprising:

providing a number of fastening holes and a number of sorting apertures in the at least one screen plate; and

inserting profiled pieces into the fastening holes which are larger in diameter than the sorting apertures to form a ridge on the at least one screen plate, wherein a projection of the profiled pieces projects adjacently above the screen surface, and wherein said projections have a larger width than portions of the profiled pieces that are inserted into the fastening holes.

Paragraph 38 of the specification has been amended as follows: --

[0038] The section through the screen plate 1 shown in Figure 2 gives an example of a sorting aperture 7 and the lower part of the fastening hole 2. Preferably, it is circular and has a minimum diameter d slightly smaller than the corner measurement or maximum cross sectional dimension e of an insertion portion the profiled piece 3 to be pressed into the openings. Here, the latter has an octagonal profile with a regular cross section. The representation shows the moment in the production process when the profiled piece 3 is pressed into the screen plate 1 approximately half-way. The side surfaces 4 of the profiled piece 3 are positioned at a right angle α to the surface of the screen. The sorting aperture 7 has a circular-cylindrical shape at its intake side, which

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then turns into a conical expansion (seen in the flow direction). Such sorting apertures are typical for screens that are to be used for sorting contaminants of fibrous paper suspensions. At the bottom edge of Figure 2, the clamp fitting between round fastening holes and octagonal profiled piece is shown in top view. --.

Paragraph 41 has been amended as follows: --

(0041) As mentioned above, it is also possible to produce the profiled pieces such that they have a projection 5' as provided in Figure 5, with a larger width adjacently above the screen surface and in the direction toward the adjacent profiled piece than the lower inserted part of the profiled piece 3'. Thus, the fastening holes can be spaced further apart, even when the projections 5 touch one another or have a very close spacing. For example, Figure 5 shows an example of a modified sorting aperture 7' with a bevel at the intake side. This shape is particularly advantageous for a high screen throughput and can be used in the other cases as well. --.

The title has been changed to – SCREENS FOR FIBROUS PAPER
SUSPENSIONS AND PROCESS FOR MAKING SAME --

The following is an examiner's statement of reasons for allowance: Doelle et al is considered the closest prior art, however, the reference fails to teach or suggest:

the steps of providing profiled pieces with insertion portions having a polygonal cross-sectional shape with a maximum cross sectional dimension that is greater than

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the minimum diameter of said fastening openings, and press inserting the insertion portions of the profiled pieces into the fastening openings as recited in instant claim 1; or

the structural limitations of each of the profiled pieces including insertion portions having a polygonal cross-sectional shape with a maximum cross-sectional dimension that is greater than the minimum diameter of said fastening openings with insertion portions are pressed into the fastening openings as recited in instant claim 23; or

the step of forming a ridge on the at least one screen plate by inserting a plurality of profiled pieces into the fastening openings in such a manner that at least a portion of the profiled pieces project above a screen surface and in such a manner that adjacent ones of the portions touch one another as recited in instant claim 45; or

the structural limitation of a projection of the profiled pieces projecting adjacently above the screen surface having a larger width than portions of the profiled pieces that are inserted into the fastening holes as recited in instant claim 46.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew O. Savage
Matthew O Savage
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